136 to the fauna is equally unsatisfactory. Despite the extensive forests, wild life is scarce. No
136 one in Cherán gets a living from hunting, and
224 the amount of game taken forms an inconsiderable amount of the food supply. Deer and peccary are sometimes hunted and occasionally damage outlying fields, but they do not seem to be numerous. Squirrels, rabbits, wild pigeons, and quail are among the animals of most economic importance. Badgers are known, but are not eaten. An exception to the general scarcity of wild life is the coyote. This animal appears to be numerous and to be a danger to livestock in the outskirts of the town. Larger predatory animals, such as the jaguar and the mountain lion, are unknown. Informants could recall only one mountain lion being seen or killed in the vicinity of the town. The region is, of course, too high for the absence of the jaguar to be surprising, but smaller members of the genus *Felis* are also rare. Only the wildcat is reported. The rattlesnake and *culebrilla* occur, but are not common. As there are few handicrafts practiced in Cherán, the community is consequently primarily agricul-
[311] tural and the only use of the forests is for lumbering, charcoal making, and grazing.

Little need be said about the people of Cherán
142 or their language. Although white admixture certainly exists in the town's population, there
[144] are virtually no acknowledged Mestizos. Until studies of the Tarascan population are completed, it perhaps will suffice to say that the people of Cherán seem to be typical Tarascans, on the average relatively short and slender, although stocky individuals are not uncommon. Their complexion is relatively dark, the hair is straight, and the features are attractive. Corpulence in old age is very rare. Goiter or
164 incipient goiter is common, especially in the
147 mountain towns, although the disease is less frequent in Cherán than in many other settlements. Teeth are bad, a condition observed for the area in pre-Columbian remains also. Not only are caries frequent, but malocclusion is common. Individuals with attractive regular teeth are the exception. (Pls. 1, upper and lower right; 2; 3, center and lower right and left.)

197 The language of Cherán is Tarascan, a tongue which shows relatively few dialectic differences.

1:Beals E-5 (1940-1941)1946 NU34 Tarasco NU34
[9,772] Sierra Tarascam

[441] [439] [927] believed to be more resistant to the illnesses of *tierra caliente*, and tales are told of women who saved their husbands by nursing them or by bringing them back to the healthful highlands. For this reason, traders rarely go alone, although large parties are rare. The major [164] disease appears to be malaria. Insects, especially one attacking the feet, are mentioned as a great bother.

Women are

[674] Robbers are also a source of danger; however, the most traveled route—that to Guerrero—is said to be entirely safe. Some of the greatest dangers on the route to Coalcomán or Colima seem to have been in Tarascan territory. The village of Capacuaro had a particularly evil reputation at one time.

[492] Goods are ordinarily transported by burros. A poor man may have to carry goods on his back. The *arrieros* never ride except when [497] seriously ill. An exception is that journeys to [494] Celaya are made on the train, while nearby trips may sometimes be made by bus since construction of the highway.

The first step in a trading expedition is the assembling of goods for the trip. These may consist of pears from Cherán; apples from Pichataro; wooden products (*"tornillo"*) from Paracho; sweetpotatoes from San Francisco; fine pottery (not cooking ware) from La Cañada, Guadalajara, or Quiroga; oils and spices from Pátzcuaro; dolls, pottery, and other goods from Celaya. Most of the goods carried by Cherán traders, however, are local in origin, i.e., within the Tarascan area. In such cases, trade goods either are assembled by one or more short preliminary purchasing trips or are bought en route. Guadalajara pottery requires a 7- or 8-day trip each way with burros. Celaya goods, as stated, involve a trip by train.

On the return trip various products are brought. From Guerrero come dried fish, dried beef, gourds, gourd containers, coconuts, and cheese, the last being most important. Few data were obtained on the products brought from Coalcomán, as few Cherán traders make this trip, but cheese and dried beef are probably the most important items. However, the one trader to give specific information bought beeswax. Chiles are brought from Colima.

Generally the goods brought back are not sold until Cherán is reached. Then they are

163 The data again are not entirely reliable because
842 of a tendency not to count deceased children until urged. Almost always emotion was manifested upon recalling a specific child. Women were more commonly able to supply the names of deceased children. It is the impression of the interviewers that the data presented are fairly accurate for all children baptised but that stillbirths and perhaps death before baptism were not counted.[28]

Although most Cherán informants believed families were small through the small number of childbirths, the data indicate an average of 5.2 births per woman. No case of a childless woman was encountered in interviewing, although some exist in Cherán. If the failure to report stillbirths is taken into account, it is probable that Cherán women would rank fairly high in fertility. The small family size consequently is due to deaths rather than to lack of births. Data from the same families indicated only 2.7 children living at the time the data were collected, indicating nearly half of all children born had already died. The data are summarized in table 13.

165 Data on deaths for the years 1936, 1938, 1939, and part of 1940 are given in tables 14, 15, and 16. As might be expected, the highest death rate is in children under 1 year of age (probably higher than shown when unrecorded stillbirths are taken into account). The second highest rate is in the period from 1 to 9 years of age. For adults, the periods from 30 to 39 years and 60 to 69 years appear to be the most critical. Again, however, ages are only estimates and must not be considered as accurate.

165 The table of deaths by causes (table 16)
753 should be considered primarily of interest in showing the disease concepts prevalent in Cherán. There were no doctors in Cherán at the time these data were collected. Generally, the cause of death was provided by the relative registering the death, at the insistence of the Secretary that he had to put down something for his records to the State authorities.
[164] Epidemics of whooping cough and smallpox are clearly recorded, however.

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[858] [28] In taking a house census at Sevina, a neighboring town, the interviewers called attention to the fact that a babe in arms had not been included in the household total. Said the grandfather: "That one is too new. One hardly knows yet whether it lives or dies, so we do not count it."

1:Beals E-5 (1940-1941)1946 NU34 Tarasco NU34

Sierra Tarascans
La Cañada

755 *zorilla* (a wild animal, perhaps a small fox) is used in ways not specified to cure skin diseases with small ulcers or pimples, illnesses of the blood, and pneumonia. Buzzards are also used in some cures, while spiders and snakes are employed in curing *mal oficio* or witchcraft. Green tomatoes are used as food in illness; they are also rubbed over the chest when there is pain, to "freshen it."

● 164 The majority of Capacuaro residents have goiter. This is said often to result from drinking from a spring of bad water. The spring is said to be bad because many humming birds drink there. Evidently only acute goiter is believed to be a disease, as the majority of people in Capacuaro consider a certain amount of swelling of the neck to be natural, so common is the affliction. If the goiter becomes too large, a knife is passed over it as though the goiter were being cut out. This is believed to stop its growth. A string about the neck is also thought to stop the goiter from growing (the same belief exists in Cherán) or, when the moon is in the first phase, someone pretends to take bites out of the swelling.

754 The power of the evil eye belongs only to certain persons in Capacuaro. The face of the person afflicted is suddenly twisted, he feels burning in the face and body and "wishes to take out his heart." The first step in the cure is to cause the patient to sweat freely. The body is "cleaned" with tules; the curer (apparently a man) also rubs the patient with his (the curer's) trousers.

755 The following remedies are reported by Rendón from Chilchota in La Cañada:

For pains, stitches, or palpitations of the heart:

1. Place on the chest a piece of red Chinese paper cut in a square and previously dipped in tepid alcohol. Over this sprinkle lemon juice and then cover the patient warmly.
2. Give tea of cooked magnolia petals with cinnamon.
3. Give tea from cooked branches of "asparagus" (of a type not eaten).
4. Give hot fresh deer blood as it comes from the animal or dried deer blood dissolved in hot water.

For "attacks," give the patient water which has been heated and into which the nostrils of

3:Beals, Carrasco & McCorkle E-5 (1940-1942) 1944
NU34 Tarasco NU34
Sierra Tarascans

574 609 with whom especially friendly relations exist, normally the visitor is not invited into the house yard. Conversation takes place at the gate of the yard; if it bids fair to be protracted, the householder may even step into the street and continue the conversation there, closing the gate behind him.

351 574 184 So far as is known, customs in other mountain towns are similar in all respects except for the attitude toward visitors. In most towns fences are rarer than in Cherán, and the visitor is invited to enter. In Sevina, it is customary for the visitor to push open the gate, pass into the middle of the house yard, and then announce himself. Two Cherán men who accompanied Beals to Sevina, commented at length on this difference; they were quite plainly shocked at the custom.

RELATION OF THE TARASCAN HOUSE TO THE ENVIRONMENT

362 136 The major insect pests are fleas. In some villages there are also bedbugs. There seems little to choose between the various types of structures, although the earthen floor of the kitchen facilitates the activities of fleas. At certain seasons of the year, all Tarascan houses swarm with fleas to such an extent that the residents often cannot get a satisfactory night's sleep.

Apparently, the climatic conditions are not propitious for large numbers of houseflies or related species. Those that do exist, however, have free access into houses. Mosquitoes and other noxious insects are unknown at Cherán.

362 164 [515] In the lack of good medical statistics, it is impossible to estimate the relation between health and housing conditions. Fleas may be responsible for the transmission of some cases of typhus and perhaps other diseases. Relative to most places in Mexico, however, insect-borne disease is probably at a minimum. Head lice and, to some extent, body lice occur, despite thorough weekly baths, and the crowded living and sleeping conditions in the kitchen must facilitate transmission of the insects.

The most serious health hazards of the Tarascan house probably lie in the damp condition much of the year, lack of ventilation, and close crowding of the inmates, especially at night. These conditions facilitate the spread of all diseases trans-

362 mitted by contact and particularly respiratory
164 and pulmonary infections. Although data are lacking, a high incidence of tuberculosis is suspected. There seems little to choose between various house types for health.

COMPARATIVE DATA

184 Most Sierra towns, on superficial acquaintance,
362 seem to have similar conditions. Local variations, of course, occur as the result of differences in rainfall and temperature (functions of location and altitude) and the number of animals kept (causing variations in the number of flies).

[Continued on P.33b]

HISTORY OF THE TARASCAN HOUSE

342 In this section we try to determine the antiquity
173 of modern house types. We do not include all the data found in early sources referring to pre-Spanish houses and house uses, but base our study of the history of the Tarascan house on modern tradition and especially on the writings of the 16th century. Traditions appear to supply useful data concerning the last century or so. The houses of stone and adobe are usually considered to be relatively recent introductions in the Sierra region, but of older use in the Lake area.[2] This view is supported by the relatively greater frequency of stone and adobe in the towns showing most Mestizo influence. In the Lake region, it is remembered that wooden structures once were more frequent. In La Cañada, at Chilchota, the lack of adequate streets is referred to the older custom of building houses in the center of the lot.

Among the variant wooden-house types discussed, kitchens of poles and "*trojes*" and the trója kosína of logs are regarded as the oldest types. Tools, until recently were limited to the ax, adze, chisel, and awl. Shakes were fastened with wooden pins or stones.

Beyond a century, however, tradition is of no value. The pre-Hispanic Tarascans and those of a few generations ago are merged into "*los antepasados*" and, unless an historically known event is referred to, it is difficult to know to what period a tradition refers. So, even if data on

[1] This section is almost entirely the work of Pedro Carrasco.
[2] In this connection, it should be recalled that the Sierra uses the Spanish word adobe, while in the Lake area a native word (isurukata) is known.

134 material and essential chemical elements, most
[241] of these soils are cropped annually without fallow. A peculiar soil type, called *uirás*, occurs near the edge of a lava flow on the southwestern shore of Lake Pátzcuaro, on Jarácuaro Island, and near Ihuatzio. The subsoil is a fibery-textured white clay (35.4 percent fine clay), from which the whitish-gray adobe bricks of Jarácuaro and Ihuatzio are made; the topsoil, when mixed with lacustrine deposits (as on Jarácuaro Island), forms a fertile loam extremely high in organic matter (nearly 5 percent) and calcium carbonate (7.7 percent). On the other hand, when the parent material lies close to the surface (as around Arócutin), the *uirás* is one of the poorest soils in the vicinity.[16]

[16] A similar soil type occurs at the edge of a lava flow along the highway on the outskirts of Zacapu. The relation between vulcanism and the formation of *uirás* is not clear.

TARASCAN
POPULATION

191 three inclusions of Matlaltzinca or Pirinda (Otomí
563 stock): (1) the largest, near present Morelia, from Undameo northeast to Charo, (2) at Taimeo, southeast of Lake Cuitzeo, and (3) at Huetamo near the Balsas.[17] Moreover, a group of Apaneca colonists lived at Guayameo, near Sirándaro on the Balsas, and an islet of Teco occurred between Tancítaro and Uruapan.[18]

161 Various factors contributed to the areal retrogression of Tarascans during the Spanish colonial and postcolonial periods. One factor was actual decrease of Indian population caused mainly by European diseases. The population of some
[167] areas was further weakened or depleted by migration of Tarascans as laborers to distant mining and agricultural centers. Moreover, Spanish and mulatto settlement within the indigenous area was a powerful force of hispanicization; wherever stock-raising estancias or sugar haciendas were established, native speech slowly disappeared. Conversely, in those areas shunned
[191] by Spanish settlers, Tarascan has been preserved to this day.

177 The most serious shock which the indigenous
● 164 cultures suffered from Spanish contact was the frightful toll taken by the contagious European
161 diseases that became epidemic throughout central

[TEXT CONTINUES BOTTOM P. 12-b --ANALYST]

[17] Data obtained from the following Relaciones Geográficas in Mus. Nac., leg. 102: Rel. de Necotlán and Rel. de Cuseo; Mus. Nac., leg. 99, Rel. de Charo Matlalzingo.

[18] Mus. Nac., leg. 103, Rel. de Sirándaro y Guayameo; Ponce Relación, 1872, vol. 1, p. 131; Mus. Nac., Col. de Gómez Orozco, vol. 1, Rel. de Tancítaro.

4: West K-5 (1946) 1948 NU34 Tarasco NU34
[P 12-b]

161 New Spain 1 year after the coming of Cortés. Thereafter epidemics occurred periodically during
164 the colonial period, completely obliterating the
177 population of some districts, especially those in the low, hot lands. Smallpox, measles, and probably typhus (terépekua) were the most common killers. Mendizábal (1939) has estimated that in the first century of Spanish occupation the Indians of New Spain were reduced to 25 percent of their pre-Conquest numbers, and that the pre-Spanish population of the diocese of Michoacán was possibly 200,000, which was reduced to some 92,000 by 1550.[19] Judging from the accounts in the Relaciones Geográficas of 1579–81, the basins of the Balsas and Tepalcatepec suffered the most heavily. There from one-third to all of the inhabitants of some villages were destroyed. Accounts of the 16th and 17th centuries mention scores of villages in the Tarascan area which are now nonexistent, the inhabi-

[19] Mendizábal made this calculation from figures given in the Suma de Visitas, ca. 1540 (Paso y Troncoso, 1905, vol. 1).

4: West K-5 (1946) 1948 NU34 Tarasco NU34
[P. 12-C]

161
177 tants having been wiped out entirely, or the few
[164] survivors having migrated later to larger towns.

Spanish exploitation and settlement in Michoacán slowly effected the reduction of Tarascan speech. Guzman's *entrada* (1530) left a trail of destruction and displacement of population throughout northern Michoacán. Moreover, dur-
[648] ing the exploitation of placer gold along the tributaries of the Balsas and Tepalcatepec (1524–35) Spanish miners destroyed and dislocated many Tarascans through enslavement and overwork.[20]

797 On the other hand, Franciscan and Augustinian
177 missionaries, who by the end of the 16th century
191 had established themselves in most of the large Tarascan pueblos, were strong agents of acculturation, replacing many indigenous material and

[20] The Indice de Protocolos, vol. 1 (ed. Millares Carlo and Mantecón), gives abundant evidence of the feverish gold panning operations in the Balsas and Tepalcatepec drainage from 1524 to 1528 and cites the wholesale use of Indian slave labor. Such activity probably continued until the enforcement (in the 1540's) of the New Laws, which forbade slave labor and consequently decreased the profitableness of gold washing. Furthermore, many Spanish adventurers turned from gold panning to silver mining after the discoveries in the Tasco district during the 1530's.

[TEXT CONTINUES TOP OF P. 13a]

563 177 191 rounded by Tarascans. A few Spanish ranchers and traders settled also in Tingüindín, a large Indian village at the western edge of the Sierra; but the extreme western Tarascan zone from Mazamitla to Los Reyes did not completely lose its native speech until the beginning of the present century.

The tierra caliente and tierra templada.—The story of the recession of Tarascan speech in the *tierra caliente* roughly parallels that in the northern plateau. In the former area disease probably [164] decimated the native population more completely than in the north, and its Europeanization was consequently more rapid. After the period of gold panning in the southern tributaries of the Tepalcatepec and Balsas Rivers, the Spaniards turned to cattle ranching in the tropical bush around Cutzamala, Pungarabato, and Huetamo in the Balsas Basin and near Apatzingán and Tomatlán in the Tepalcatepec lowland. Although the tropical grasses and shrubs were less nourishing than those in the northern plateau, the *tierra caliente* was favored by abundant springs and streams. As in the north, the natives rapidly became *vaqueros* and mixed with the mulattoes and Negroes on the ranches. Moreover, during the last decades of the 16th century Spaniards began to establish sugar plantations and mills in the upper limits of the *tierra caliente*.[35] The mill settlements (*trapiches*, *ingenios*), like the cattle ranches, were centers of acculturation and miscegenation. Large groups of Negro and mulatto slaves, male and female, were imported to operate the *trapiches* (according to colonial law, Indians were exempt from mill labor), while Tarascan [464] forced and free workers planted and harvested cane in fields nearby. Race mixing and gradual loss of native speech was inevitable. Again, ex- 191 ploitation of the copper mines of the *tierra caliente* and the establishment of smelting centers in [177] Tzatzio and Santa Clara was another activity which helped acculturation and hastened the loss of the aboriginal language. In 1750 the limits of Tarascan speech still coincided with the 16th century pre-Spanish boundaries, but in some areas, such as the Tepalcatepec Basin, the percentage of inhabitants speaking Tarascan was only 25 percent of the total. In the *tierra templada* sugar-growing districts south of Zitácuaro, in the Peribán Valley, and the upper escarpment zone around Ario and Tacámbaro, the ratio of

[35] In 1540 a sugar mill had been established in Taximaroa, on the plateau above Tuxpan (Paso y Troncoso, 1905, vol. I, p. 253).

[TEXT CONTINUES TOP OF P. 172a---Analyst]

11: Boyd H-4, 5 (1953) 1958
NU34 Tarasco NU34

poor have only pain and sorrow. The poor is our brother; the rich is our master. Love the poor; he is of our race. The rich is the foreigner; he pays us with sarcasm and jokes. Remember always that he who suffers and cries needs your help. These are the maxims of love.

THE LEGEND OF TACAMBA

Historical Comment

All the drainage of southwestern Michoacán is southward to the Balsas river, the heart of the tropical region. This area was in pre-Spanish times seemingly under Tarascan domain (Osborne, 1943). Coyucán, mentioned in the legend of Tacamba as being one of the seats of Tarascan power at the beginning of the sixteenth century, is probably the town of Coyuca, a scant thirty-five miles south of present Huetamo (Fig. 2). At the time of the Conquest it was still an area of dispute between the Tarascans and the Aztecs, although both sides were temporarily at peace.

The wars between the Tarascans and Aztecs over this area accounted in large part for the refusal of Siguangua and Tzimtzicha to lend Tarascan support to the Aztecs against the Spaniards, thereby enabling the conquistadores to defeat both empires separately.

Tacamba, like Camachuén of the preceding legend, was one of the vassal princes of the Tarascan empire under King Siguanga and Tzimtzicha, his successor, at the time of the coming of the Spaniards. The death of Siguangua is accurately preserved in the body of the legend. In the first year of the Spanish arrival on the borders of Michoacán, smallpox and dysentery brought by Spanish messengers struck the Tarascan capital killing the king and his chief priests. The epidemic continued to take a terrible toll among the native population, weakening the Tarascans for the Spanish Conquest.